

IN THE CLAIMS:

1. (Previously Presented) A method for polishing a wafer comprising the steps of:
holding a wafer on a rotatable wafer holding plate;
providing a rotatable table;
adhering a polishing cloth to said rotatable table;

5 supplying a polishing agent containing an alkaline solution to said polishing cloth, said alkaline solution containing an organic base or a salt thereof and silica having essentially spherical particles, wherein the organic base or said salt is tetramethyl ammonium hydroxide, said tetramethyl ammonium hydroxide being used in a range from greater than 10 wt % to less than or equal to 20 wt %;

10 polishing a surface of said wafer with said polishing cloth by placing said polishing cloth with said polishing agent in contact with said surface of said wafer;

controlling pH of said polishing agent in a pH value range level from 10 to 13, wherein Na_2CO_3 is used for pH adjustment of said alkaline solution.

2. (Previously Presented) A method for polishing a wafer comprising the steps of:
holding a wafer on a rotatable wafer holding plate; and

5 polishing a surface of the wafer being in contact with a polishing cloth adhered on a rotatable table in such a state that a polishing agent is supplied onto the polishing cloth, wherein the polishing agent is an alkaline solution which contains silica, said silica being essentially uniformly dispersed in said alkaline solution, the silica having particles each essentially in the

shape of a sphere and an average particle diameter of 5 to 10 nm, said polishing agent being an alkaline solution which contains an organic base or a salt thereof, wherein the organic base or said salt is tetramethyl ammonium hydroxide, said tetramethyl ammonium hydroxide being in a range of greater than 10 wt % to less than or equal to 20 wt %.

3 - 9. (Canceled)

10. (Previously Presented) The method for polishing a wafer according to claim 1, wherein amount of the organic base or the salt thereof does not exceed a dissolution limit of the polishing agent in use.

11. (Previously Presented) The method for polishing a wafer according to claim 1, wherein the wafer is a silicon wafer.

12 - 14. (Canceled)

15. (Previously Presented) The method for polishing a wafer according to claim 1, wherein the polishing cloth is of an unwoven cloth type.

16. (Previously Presented) The method for polishing a wafer according to claim 1, wherein Asker C hardness of the polishing cloth is 50 or more.

17. (Previously Presented) The method for polishing a wafer according to claim 1, wherein stock removal of the wafer is 1 μm or more.

18. (Currently Amended) A method for polishing a wafer comprising the steps of:
holding a wafer on a rotatable wafer holding plate;
providing a rotatable table;
connecting a polishing cloth to said rotatable table;

5 supplying a polishing agent containing an alkaline solution to said polishing cloth, said alkaline solution containing an organic base or a salt thereof and silica having essentially spherical particles, said organic base being a quaternary ammonium hydroxide;

providing a water supply line;

providing an additive supply line;

10 providing a starting slurry supply line;

providing a slurry ~~holding~~ preparation tank, said slurry preparation tank being connected to said water supply line, said additive supply line and said slurry supply line;

mixing water delivered via said water supply line, one or more additives delivered via said additive supply line and a starting slurry delivered via said starting slurry supply line to
15 form a slurry mixture;

storing said slurry mixture in said slurry ~~holding~~ preparation tank;

providing a holding means for holding said polishing agent located adjacent to said slurry ~~holding~~ preparation tank, said holding means being connected to said slurry ~~holding~~

preparation tank via a slurry mixture supply line;

20 polishing a surface of said wafer with said polishing cloth by placing said polishing cloth
in contact with said surface of said wafer;

collecting excess polishing agent after polishing said wafer with said polishing agent;

supplying said excess polishing agent to said means for holding said polishing agent, said
excess polishing agent mixing with existing polishing agent contained in said holding means;

25 adding said slurry mixture to said excess polishing agent and said existing polishing
agent contained in said holding means via said slurry mixture supply line to form a polishing
agent mixture;

adjusting pH level of said polishing agent mixture in a pH value range from 10 to 13,
wherein Na_2CO_3 is used for pH adjustment of said alkaline solution; and

30 supplying said polishing agent mixture to said polishing cloth.

19. (Previously Presented) The method for polishing a wafer according to claim 18,
wherein the silica is used at a concentration in the range of from 10 to 70 wt % of silica.

20. (Previously Presented) The method for polishing a wafer according to claim 18,
wherein the polishing cloth is of an unwoven cloth type.

21. (Previously Presented) The method for polishing a wafer according to claim 20,
wherein the silica is used at a concentration in the range of from 10 to 70 wt % of silica.

22. (Previously Presented) The method for polishing a wafer according to claim 18, wherein hardness (Asker C hardness) of the polishing cloth is 50 or more.

23. (Previously Presented) The method for polishing a wafer according to claim 18, wherein amount of the organic base or the salt thereof does not exceed a dissolution limit of the polishing agent in use.

24. (Canceled)

25. (Currently Amended) The method for polishing a wafer according to claim 18, further comprising the step of:

providing a collecting tank, said collecting tank being located adjacent to said rotatable table, said collecting tank receiving said excess polishing agent, said collecting tank having a drainage port;

providing an excess polishing agent supply line, said excess polishing agent supply line being connected to said drainage port of said collecting tank and said holding means;

providing a pump connected to said excess polishing agent supply line;

delivering said excess polishing agent from said collecting tank through said excess polishing agent supply line to said holding means via said pump.

26. (Previously Presented) The method for polishing a wafer according to claim 18,

wherein the silica is used at a concentration in the range of from 10 to 20 wt % of silica.

27. (Previously Presented) The method for polishing a wafer according to claim 2, further comprising the steps of:

controlling pH of said polishing agent in a pH value range level from 12 to 13, wherein Na_2CO_3 is used for pH adjustment of said alkaline solution.